SITE:	Moss Landing	LATITUDE:	36-47.7
HAZARD:	Vessel Navigation	LONGITUDE:	121-47.0
VOLUME:	87,500 bbl		
DURATION:	3 days		

TRAJECTORY ANALYSIS

A spill trajectory envelope was calculated for the vessel hazard area at Moss Landing, which is located in central Monterey Bay approximately three miles north of the Salinas River. The trajectory analysis considered oil transport by the wind and tidal currents, and spreading of the oil spill by physical processes such as gravity, surface tension, and tidal dispersion. Spill transport on an ebbing tide would be expected to move the oil from the landing approximately 4 miles to the southwest towards Point Pinos. Tidal action during the flood tide would be expected to transport a spill a similar distance to the north. Spreading of the spill would be expected to increase the size of the spill by a similar magnitude over the 10-day time period. Based on this analysis, spreading and tidal transport without additional wind driven transport would not be expected to move the spill out of Monterey Bay within 3 days.

Wind-induced surface currents could cause additional transport of oil depending on the direction, strength and persistence of local winds. Certain wind conditions could allow the spill to be transported to the north or south along the coast outside of Monterey Bay. Easterly winds could transport the spill as far as 10 miles offshore over a 3-day time period. When combined with the spreading effects of tidal action and mechanical spreading, north-northwesterly winds could transport the spill down the coast as far as Point Sur. Likewise, south-south-easterly winds could move the oil up the coast towards San Francisco to within 3 miles of Point Ano Nuevo.

These spill trajectory envelopes represent the outer perimeter of shoreside areas that could receive oil in the event of any spill. The envelopes are based on regional extremes of climate, tide, current, and wind and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of any one spill. A full discussion of the details used for preparing these spill envelopes is provided in Section 202.2.